

Lowell City Hall Back-Up Power Design – Scope of Work

Part 1 – General

A. Intent

Lowell's historic City Hall is in the process of being modernized to support a more contemporary work environment. As part of this effort, the City of Lowell is seeking to bring emergency and standby power to several areas of the building which have been deemed most critical. The City has been working with a consultant to provide load testing of all of the relevant switchgear and electrical panels in City Hall and the adjacent JFK Civic Center. The results of this load testing have been compiled into a final report titled "Lowell City Hall and JFK Civic Center Back-Up Power Load Testing Report" dated July 1, 2013.

There is an existing diesel generator at the JFK Civic Center that is significantly oversized for the amount of back-up power it is currently providing. This generator is currently providing back-up power to the JFK Civic Center's Emergency 9-1-1 and a few other select panels of the JFK Civic Center. The July 1, 2013 report also includes load testing of the switchgear feeding this generator.

The intent of this RFQ is to find a licensed, qualified engineering firm to provide a complete construction design which will bring back-up and emergency power to the remainder of the JFK Civic Center and to selected panels at City Hall. This will be accomplished by tying these panels into the existing generator at the JFK Civic Center. There is abandoned steam piping below ground between City Hall and the JFK Civic Center that could potentially be utilized to run the new conduit required as part of this work in order to avoid any excavation.

B. Definitions

| | |
|--------------------|--|
| <u>Owner:</u> | The City of Lowell |
| <u>Designer:</u> | Engineering firm selected to perform this scope of work |
| <u>Contractor:</u> | Contractor selected to perform the installation of the designed system |
| <u>Provide:</u> | Furnish, install, and connect |
| <u>Furnish:</u> | Supply material only |
| <u>EXR:</u> | Existing to remain |

C. Scope of Work

- Designer is to utilize the "Lowell City Hall and JFK Civic Center Back-up Power Load Testing Report" dated July 1, 2013.
- Designer is to meet with all required City personnel that are responsible for the building equipment to be included on the new back-up power system. City personnel that must be consulted include, but are not limited to: the MIS Department, City Electrician, and City Electrical Inspector.
- Designer will attend and run up to (4) separate design meetings with all required personnel designated by the Owner. Designer is expected to keep minutes of these meetings.
 - Meeting 1 – Preliminary discussion to establish City requirements
 - Meeting 2 – 50% Design Review
 - Meeting 3 – 90% Design Review
 - Meeting 4 – 100% Construction Document Review
- Provide construction documents (plans, specifications, and a cost estimate) for the following items of work:
 - Re-feed the existing Fire Department standby power system (SPS) from the existing JFK Civic Center SPS, including demolition of the existing generator and ATS;
 - Re-feed the existing City Hall SPS, and existing MIS disconnect from the existing JFK Civic Center SPS, including a new SPS feeder to City Hall, and demolition of the existing City Hall generator and ATS;

- Re-feed several existing ‘normal’ panels in the Police Department (serving the booking/holding area, roll call room, etc.) from the JFK Civic Center SPS;
- Alternatively, verify summer electric demand figures and verify the existing JFK SPS can accept the *entire* JFK Civic Center load;
- Provide emergency lighting in the Police Department holding area to meet current code, in the most cost effective manner (i.e. unit equipment, or from the JFK Civic Center EPS);
- Construct an emergency power system (EPS) at City Hall, including fire rated feeders, distribution, etc. to feed City Hall elevator, elevator cab lighting, and selected existing and new egress lighting;
- Verify the ratings of all existing distribution components (ATS’, feeders, transformers, [panel boards](#), branch circuits, etc.) to ensure they can accept the added load, and upgrade as required;
- Existing load data for the JFK Civic Center EPS and SPS, City Hall and Fire Department SPS’, and City Hall MIS feeder will be provided to the final designer.
- Designer will be responsible for assembling these into a final bid package. These bid documents will be put out to bid by the Lowell Purchasing Department pursuant to Massachusetts State Law.
- All construction documentation by the designer is to be per Massachusetts Building Code.
- Designer will assist the City with the evaluation and review of bids received for installation of the designed system.
- Designer will perform construction phase services that shall include, but are not limited to, the approval of submittals, shop drawings, proposed change orders, and requests for information from the contractor.
- Designer will perform on-site inspections of all work completed by the Contractor to ensure it has been satisfactorily completed per the Construction Documents.
- Designer will create a punchlist when the project is substantially complete and sign-off on the punchlist when all items have been completed.
- Designer will review Contractor’s As-Built drawings and close-out documentation for accuracy.

D. Proposal Requirements

The City requires that each proposer follow the guidelines for proposal format and content so that the proposal evaluation and selection process can occur in an orderly, timely, and equitable manner.

1. At least three examples of designs of public construction projects in Massachusetts.
2. At least three examples of work completed in historic buildings.
3. At least three examples of similar generator projects in public buildings.
4. At least three examples of projects in urban settings.
5. Possession of an active valid Massachusetts licensure in electrical engineering.
6. **Complete Standard Designer Application Form for Municipalities and Public Agencies not within DSB Jurisdiction (updated July 2011).**

E. Content

The proposal must contain a detailed description of how the proposer would carry out the requirements set forth in the RFQ, including a schedule for the completion of each task. The information submitted must include, but should not necessarily be limited to, the following items:

1. A statement in concise terms of your understanding of the scope and work to be accomplished on this project.
2. The proposer must identify the persons who will be responsible for directing the work to be performed under the contract. For each individual with identified responsibilities, the proposer

must include a statement of the percentage of his/her time that will be devoted to this project and a complete resume.

3. Background data on all sub consultant firms, including some or all of the disciplines below and other consultants considered appropriate, who will play a role in the project.
4. A company background statement to include:
 - a. Firm name;
 - b. Addresses and telephone numbers of all firm offices;
 - c. Structure of firm, i.e., sole proprietorship, partnership, corporation;
 - d. Size of firm;
 - e. Years firm has been in business;
 - f. Current financial statement and balance sheet;
 - g. Names of principals in firm;
 - h. Educational and experiential background of principals and those who will be working on the project;
 - i. Names of those in the firm who will be working on the project and copies of their licenses, registrations or certifications;
 - j. Qualifications for specific project;
 - k. Name of owners of similar projects who can be contacted as references;
 - l. Listing of contracts currently under contract;
 - m. Listing of any actions taken by any regulatory agency or litigation involving the firm or its agents or employees with respect to any work performed;
 - n. All insurances that the firm has that would be applicable to the work, and;
 - o. An explanation of how the firm provides quality control in each phase of the project.
 - p. An Affirmative Action & Non-Discrimination Statement/Plan.

General Proposal Appearance

The name of the proposer and title of the project must appear on the outside front cover of each binder. Each page of the proposal must be numbered consecutively from the beginning of the proposal through all appended material.

The Committee reserves the right to reject any unsolicited modifications or additions received between the submission date and proposal selection.

Attachments:

- Standard Designer Application Form for Municipalities and Public Agencies not within
DSB Jurisdiction